

QY 2280 spProThrAspMetAspPro 2286
 Db 6856 ACCCAACAGACATGGACCC 6875

RESULT 3
 RNCALG
 LOCUS
 DEFINITION Rattus norvegicus low voltage-activated, T-type calcium channel
 RNCALG 7542 bp mRNA linear ROD 24-OCT-1998
 ACCESSION AF027984
 VERSION AF027984.1 GI:3786350
 KEYWORDS
 SOURCE Rattus norvegicus (Norway rat)
 ORGANISM
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus;
 Perez-Reyes, E. (bases 1 to 7542)
 TITLE Williamson, M.P., Fox, M., Rees, M. and Lee, J.H.
 Molecular characterization of a neuronal low-voltage-activated
 T-type calcium channel
 JOURNAL Nature 391 (6670), 896-900 (1998)
 MEDLINE 98154730
 PUBMED 9495342
 REFERENCE 2 (bases 1 to 7542)
 Cribbs, L.L., Yang, J., Daud, A., Lee, J.-H. and Perez-Reyes, E.
 Direct Submission
 Submitted (02-OCT-1997) Physiology, Loyola University Medical
 Center, 2160 South First Avenue, Maywood, IL 60153, USA
 REFERENCE 3 (bases 1 to 7542)
 Cribbs, L.L., Yang, J., Daud, A., Lee, J.-H. and Perez-Reyes, E.
 Direct Submission
 Submitted (22-OCT-1998) Physiology, Loyola University Medical
 Center, 2160 South First Avenue, Maywood, IL 60153, USA
 REMARK
 COMMENT Sequence update by submitter
 ON Oct 24, 1998 this sequence version replaced gi:2921748.
 FEATURES
 Location/Qualifiers
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ORIGIN

Alignment Scores:

Pred. No.:
 Score: 11980.00 Length: 7542
 Percent Similarity: 99.78% Matches: 2283
 Best Local Similarity: 99.78% Conservative: 0
 Query Match: 99.60% Mismatches: 3
 DB: 10 Indels: 2
 Gaps: 0

US-09-611-257A-24 (1-2287) x RNCALG (1-7542)

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 QY 61 ProGlyAla-AlaGlyAla-GlySerThrGluLysAspProGlySerAlaAspSerGlu 80
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QY	200	erLeuAspLeuGlnAsnValSerPheSerAlaValArgThrValArgValLeuArgProL	220	QY	560	lySerArgArgLeuMetLeuProProSerThrProThrProSerGlyGlyProProA	580
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DB	1105	TGCGTATGCTGGGCAACGCTCGCTGCTGTGTTCTTCTGCTTTTCTATCTTTGGCATCG	1164	DB	2185	GCCAGGACCCCTCCAGATGCCATCGAGGCATCTGGTAGGACTGTGGGTAGTGGGA	2244
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DB	1165	TGGCGGTCCAGCTGTGGGAGGACTGCTTCGCAACCGGTGCTTCTCCCGGAACTTCA	1224	DB	2245	AGGTGTATCCCACTGTGTATACCAAGCTTCCACAGAGATCTGAAGGATTAAGCACTAG	2304
QY	280	erLeuProLeuSerValAspLeuGluProTyrTyrGlnThrGluAsnGluAspGluSerP	300	QY	640	alGluValAlaProSerProGlyProProThrLeuThrSerPheAsnIleProProGlyP	660
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QY	320	euArgGlyGluGlyGlyGlyProProCysSerLeuAspTyrGluThrTyrAsnSerS	340	QY	680	ysLeuIleSerSerProCysSerLysAlaAspSerGlyAlaCysGlyProAspSerCysP	700
DB	1345	TGCGTGGGAGGCGGTGGTGGCCACCCTGCGAGTCTGGACTATGAGACTTAAACAGTT	1404	DB	2425	GCAAAATCTCCAGCCCTTGTCTCAAGGACAGACAGTGGAGCCCTGGCGGCGGACAGTTGTC	2484
QY	340	erSerAsnThrThrCysValAsnTrpAsnGlnTyrTyrThrAsnCysSerAlaGlyGluH	360	QY	700	toTyrCysAlaArgThrGlyAlaGlyGluProGluSerAlaAspHisValMetProAspS	720
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QY	360	isAsnProPheLysGlyAlaIleAsnPheAspAsnIleGlyTyrAlaTrpIleAlaIleP	380	QY	720	erAspSerGluAlaValTyrGluPheThrGlnAspAlaGlnHisSerAspLeuArgAspP	740
DB	1465	ACAACCCCTTCAAAGGCGCCATCACTTTGACAACATTTGGCTATGCTGATGCTGCCATCT	1524	DB	2545	CAGACAGGAGGCTGTGTATGATTCTACACAGGACGCTCAGACAGTACCTCCCGGATC	2604
QY	380	heGlnValIleThrLeuGluGlyTrpValAspIleMetTyrPheValMetAspAlaHis	400	QY	740	roHisSerArgArgGlnArgSerLeuGlyProAspAlaGluProSerSerValLeuA	760
DB	1525	TCCAGGTATCACTAGGAGGCTGGGTGCACATCATGACTTCTGTAATGGACGCTCACT	1584	DB	2605	CCCACAGCCGGCGGACAGCGGAGCCCTGGGCCAGATGCGAGGCTAGTCTGTGCTGG	2664
QY	400	erPheTyrAsnPheIleTyrPheIleLeuLeuIleValGlySerPhePheMetIleA	420	QY	760	laphTrpArgLeuIleCysAspThrPheArgLysIleValAspSerLysTyrPheGlyA	780
DB	1585	CCTTCTACAACTTCACTTCTTCTCTCATCATCGTGGGCTCCTTCTTCTCATGATCA	1644	DB	2665	CTTTCCTGGAGGCTGATCTGTGACATTCGGAAGATCGTAGATAGCAAAATACTTTGGCC	2724
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DB	1645	ACCTGTGCTGGTGGTGAATGGCCAGCAGTTCTCCGAGACCAACAGCGGAGAGTCAGC	1704	DB	2725	GGGGAAATCATGATCGCCATCTCTGGTCAATACACTCAGCATGGGATCGAGTACCAGAGC	2784
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QY	480	laArgArgLeuAlaGlnValSerArgAlaIleGlyValArgAlaGlyLeuLeuSerSerP	500	QY	840	yrAsnIlePheAspGlyValIleValValIleSerValTrpGluIleValGlnGlnG	860
DB	1825	CCCGAAGCTGGCCAGGCTCTTAGGGCTATAGCGTGGGGCTGGGCTGCTCAGCAGCC	1884	DB	2905	ACAAATCTTGTATGGTGTCTTGTGGTGTATCAGTGTGTGGGAGATTGTGGGCCAGCAGG	2964
QY	500	roValAlaArgSerGlyGlnGluProGlnProSerGlySerCysThrArgSerHisArgA	520	QY	860	lyGlyGlyLeuSerValLeuArgThrPheArgLeuMetArgValLeuLysLeuValArgP	880
DB	1885	CAGTGGCCCGTAGTGGGCGAGGAGCCCGAGCCAGTGGCAGCTGCGCTCACACCGTC	1944	DB	2965	GAGGTGGGCTGTGCGTGTGCGGACCTTCCGCTGTATCGGGTGTGAAGTGTGGTGGCT	3024
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DB	1945	GTCTGTCTGTCCACACCTGGTCCACCAACCATCACCAACCATCACCACTACCACTGG	2004	DB	3025	TCTTCCGCGCCCTGCGAGCCAGCTCGTGTGCTCATGAAGACCATGGACAACGTTGGCCA	3084
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Db	3085	CTGATGCTCTCTCATGCTGTTTCATCTTCATGCTCTGAGCATCTGTCATCTCT	4165	GAGAGCGAGATTCTGCTGGCCCTATATCTTTCTCTCTCTCAAGGTTTCTGCTCTCTGT	4224
Qy	920	heGlyCysAlaPheAlaSerGluArgAspGlyAspThrLeuProAspArgLysAsnPheA	1280	ysHisArgIleIleThrHisLysMetPheAspHisValValLeuValIleIlePheLeuA	1300
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Qy	980	euMetThrPheGlyAsnTrpValLeuPheAsnLeuValAlaIleLeuValGluGlyP	1340	alValAlaLeuGlyTrpCysPheGlyGluGlnAlaTyrLeuArgSerSerTrpAsnValL	1360
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Qy	1000	heGlnAlaGluGlyAspAlaThrLysSerGluSerGluProAspPhePheSerProSerV	1360	euAspGlyLeuLeuValLeuIleSerValIleAspIleLeuValSerMetValSerAspS	1380
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Db	3505	AACTACGAAAGACCTTTTGGCCACCCCTCATCATCATACGCTGCGACCACTATGTAC	4585	TCAGGGTCTATCAGCGCGGCCCCAGGACTGAGGCTGTGTGTAGAGACTCTGTATGTATCCC	4644
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Db	3685	CCGCGAGCTCCCGCAGCATGCTTGGAGTGGCAGCAGCAGCTGAGCAGCAGCGCTCCA	4765	TCATTAACCAATCCGACTCGGCTGAGCGCAGCTACCGATGGCTCGGCACAAGTCAACT	4824
Qy	1120	erArgAsnSerLeuGlyArgAlaProSerLysArgArgSerProSerGlyGluArgA	1480	heAspAsnLeuGlyGlnAlaLeuMetSerLeuPheValLeuAlaSerLysAspGlyTrpV	1500
Db	3745	GCAGGAACAGCTGGCGGGCCCCAGCTAAAGCGGAGGAGCCCGAGCGGGCGGA	4825	TTGACAACCTGGGCGAGCTCTGATGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	4884
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Qy	1200	lyArgSerAlaSerGluHisGlnAspCysAsnGlyLysSerAlaSerGlyArgLeuA	1560	luGluGluAlaArgArgArgGluGluLysArgLeuArgLeuGluLysLysArgArgS	1580
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Db	4105	ATCTGAGCAAAAGGAGACGATACAAAGCTGGGTGCAGATCCCGCTTCTCTGCTGTGCC	5185	TCCGCTCTTGTTCACCATCTGTGTACCGCCACTACTCTGAGCTCTTCTATCTACTCTGTG	5244
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			5245	TCATCGGCTGACCTGTGTCTACTATGGCCATGGAAACATTACGAGCAGCCCGCAGATCTCTGG	5304

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1980 lYLeuProLysAlaGlnSerGlySerIleLeuSerValHisSerGlnProAlaAspThrS 2000
6325 GGCTCCCAAGCCAGTCAGGCTCCATCTTGTCCGTTTCACTTCCCAACCAAGCAGACACCA 6384

2000 erCysIleLeuGlnLeuProLysAspValHisTyrLeuLeuGlnProHisGlyAlaProT 2020
Db GCTGCATCTCAGCTTCCCAAGATGTGCATATCTGCTCAGCCTCATGGGGCTCCCA 6444
2020 hrTrpGlyValIleProLysLeuProProGlyArgSerProLeuAlaGlnArgProL 2040
Db CTGGGGGGCCATCCCTAACTACCCCACTGGCCGCTCCCTCTGGCTCAGAGGCTC 6504
2040 euArgArgGlnAlaAlaIleArgThrAspSerLeuAspValGlnGlyLeuGlySerArgG 2060
Db TCAGCGCGCAGCAGCAATAAGGACTGACTCCCTGGATGTGCAGGGCTTGGGTAGCGCG 6564
2060 luAspLeuLeuSerGluValSerGlyProSerCysProLeuThrArgSerSerPheT 2080
Db AAGACCTGTTGTTCAGAGGTGAGTGGGCCCTCTCCCTCTGACCGGTCTCATCTCTTCT 6624
2080 rpGlyGlySerSerIleGlnValGlnArgSerGlyIleGlnSerLysValSerLysH 2100
Db GGGCGGGTTCAGGATTCAGGTGAGCGCTTCCGGCATCCAGAGCAAAAGTCTTCCAAGC 6684
2100 isileArgLeuProAlaProCysProGlyLeuGluProSerTrpAlaLysAspProProG 2120
Db ACATCCGCTTCCAGCCCTTGGCCAGGCTTGAACCCAGCTGGGCCAAGGACCTCCAG 6744
2120 luThrArgSerSerLeuGluLeuAspThrGluLeuSerTrpIleSerGlyAspLeuLeuP 2140
Db AGACCAGAGCAGCTTGAAGCTGACGAGCTGAGCTGGATTTTCAGAGACCTCTCTTC 6804
2140 roSerSerGlnGluLysProLeuPheProArgAspLeuLysCysTyrSerValGluT 2160
Db CCAGCAGCAGAGAAACCCCTGTTCCACGGGACCTTGAAGAAGTGTCTACAGTTAGAGA 6864
2160 hrGlnSerCysArgArgProGlyPheTrpLeuAspGluGlnArgHisSerIleA 2180
Db CCCAGAGCTGCGCGCAGGCTGGTCTTCTGGCTAGATGAACAGCGGAGACACTCCATTG 6924
2180 laValSerCysLeuAspSerGlySerGlnProArgLeuCysProSerProSerSerLeuG 2200
Db CTGTGAGCTGTCTGAGCAGCGGCTCCCAACCCCGCTTATGTCCAAGCCCTTCAAGCCTCG 6984
2200 lYGlyGlnProLeuGlyGlyProGlySerArgProLysValLysLeuSerProProSerI 2220
Db GGGGCCAACCTTCTGGGGTCTTGGGAGCGGCTTGAAGAAAACCTCAGCCCAACCCAGTA 7044
2220 leSerIleAspProProGluSerGlnGlySerArgProProCysSerProGlyValCysL 2240
Db TCTCTATAGACCCCGGAGAGCAGGCTCTCGGCCCCCATGCGTCTCTGGTGTCTGCC 7104
2240 euArgArgArgAlaProAlaSerAspSerLysAspProSerValSerSerProLeuAspS 2260
Db TCAGGAGGAGGCGCGCCGAGCTGACTCTAAGGATCCCTCGGCTCTCCAGCCCTTGA 7164
2260 erThrAlaAlaSerProSerProLysValAspThrLeuSerLeuSerGlyLeuSerSerA 2280
Db GCAGGCTGCTTCACTCTCCCAAGAAAGACAGCTGAGTCTCTCTGTTTGTCTTCTG 7224
2280 spProThrAspMetAspPro 2286
Db ACCCAACAGACATGGACCC 7244
RESULT 4
BD224079 7285 bp DNA linear PAT 17-JUL-2003
LOCUS T-type calcium channel.
DEFINITION BD224079
ACCESSION BD224079
VERSION BD224079.1 GI:33033849
KEYWORDS JP 2002525077-A/2.
SOURCE Rattus sp.
ORGANISM Rattus sp.
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE 1 (bases 1 to 7285)